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**We claim:**

1. A process for preparing hydrocyanic acid (HCN) by catalytic dehydration of gaseous formamide in a reactor which has an inner reactor surface made of a steel comprising iron and chromium and nickel.  
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2. A process as claimed in claim 1, wherein the reactor contains no additional internals and/or catalysts.
- 10 3. A process as claimed in claim 1 or 2, wherein the steel contains nickel and chromium in a ratio of from 1:1 to 1:2.
4. A process as claimed in any of claims 1 to 3, wherein the inner reactor surface is made of a steel comprising  $\geq 60\%$  by weight of iron.  
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5. A process as claimed in any of claims 1 to 4, wherein the pressure/load ratio is from 1 to 100 kg of formamide/m<sup>2</sup> of reactor surface, preferably from 5 to 80 kg of formamide/m<sup>2</sup> of reactor surface.
- 20 6. A process as claimed in any of claims 1 to 5, wherein the preparation of hydrocyanic acid is carried out in the presence of atmospheric oxygen, preferably from 10 to 50 standard l of air/kg of formamide.
7. A process as claimed in any of claims 1 to 6 carried out at from 350 to 650°C.  
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8. A process as claimed in any of claims 1 to 7, wherein the reactor is a tube reactor having one or more tubes.
9. A reactor for preparing hydrocyanic acid by catalytic dehydration of gaseous formamide, which has an inner reactor surface made of a steel comprising iron and chromium and nickel.  
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10. A reactor as claimed in claim 9, wherein the steel comprises nickel and chromium in a ratio of from 1:1 to 1:2.
- 35 11. A reactor as claimed in claim 9 or 10, wherein the inner reactor surface is made up of a steel comprising  $\geq 60\%$  by weight of iron.

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12. The use of a reactor as claimed in any of claims 9 to 11 in a process for preparing hydrocyanic acid by catalytic dehydration of gaseous formamide.
13. The use as claimed in claim 12, wherein the reactor contains no additional internals and/or catalysts.

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